

Appl. No. 09/888,013

Atty. Docket No. 18938-2363001

REMARKS

By way of this amendment, claims 1, 7 and 11 have been amended. New claim 24 has been added. Claims 1-4 and 6-24 are currently pending in the application. Applicant hereby requests further examination and reconsideration in view of the following remarks.

The Examiner has rejected claim 7 under 35 U.S.C. § 112 because there is insufficient antecedent for the recitation of "underwater structure." In response thereto, this recitation has been amended to "support structure," which has antecedent basis in claim 1. Accordingly, it is respectfully submitted that the rejection under 35 U.S.C. § 112 has been overcome.

The Examiner has rejected claims 1-3, 6 and 8 under 35 U.S.C. § 102(b) as being anticipated by Bailey et al. This ground of rejection is respectfully traversed in light of the present amendment.

Bailey et al discloses a system for erosion control, used primarily in rivers, that includes a plurality of erosion control structures 100. The embodiment of Figure 9 includes a "matrix structure" 160 mounted on vertical supports 150 via sliding sleeves 120. The matrix structure 160 is designed to provide a variably permeable surface. The erosion control structures of Bailey et al in general are intended to be highly permeable and allow the passage of water. For example, these structures are described in column 8 of Bailey et al to range from 60% to 75% permeable.

In contrast, claim 1 has been amended to recite a curtain that substantially impedes water flow therethrough. Support for this limitation is found in the present specification. For instance, the sentence beginning at line 30 of page 3 states that water associated with a wave is "allowed to pass around the curtain," implying that little or no water passes through the curtain. The matrix structure 160 of Bailey et al, which is intended to allow 60% to 75% of incident water to pass through, is clearly not a curtain that substantially impedes water

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flow therethrough. Indeed, the matrix structure is illustrated as being more of a netting than a curtain.

For these reasons, it is respectfully submitted that independent claim 1, and the claims depending therefrom, are allowable over Bailey et al. Applicant notes that claims 2-4 have previously been amended so as to depend from claim 11; these claims no longer depend from claim 1.

The Examiner has rejected claims 11-13, 16 and 21-23 under 35 U.S.C. § 102(b) as being anticipated by Ruhlman. This ground of rejection is respectfully traversed in light of the present amendment.

Ruhlman discloses a water barrier flotation curtain intended to physically isolate a portion of a body of water to prevent contamination. The flotation curtain 10 comprises a buoyant panel 18 made of foam-like material and having a second flotation device 16 attached to its upper edge. As described in lines 28-49 of column 5 and shown in Figures 7-9, the curtain 10 is pushed completely under water in the presence of a wave (so as to protect the curtain from breaking and tearing) and returns to its upright position in still waters.

As such, Ruhlman fails to disclose the breakwater system now recited in claim 11. Claim 11 recites a curtain attached between first and second support members. The first and second support members allow the curtain to freely rise in response to a wave and freely fall after a wave passes. The breakwater system of claim 11 is thus opposite of what Ruhlman discloses. In claim 11, the curtain rises with a wave and falls when there is no wave. The curtain 10 of Ruhlman falls with a wave and rises when there is no wave. Accordingly, it is respectfully submitted that independent claim 11 is allowable over Ruhlman. Claims 12, 13, 16 and 21-23 depend from claim 11 and are thus also believed to be allowable.

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The Examiner has rejected claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Bailey et al in view of Parker. This ground of rejection is respectfully traversed.

The Examiner relies on Parker for teaching use of hook-and-loop fasteners. As such, Parker does not overcome the above-described deficiency of Bailey et al of not disclosing a curtain that substantially impedes water flow therethrough. Similarly, Parker does not overcome the above-described deficiency of Ruhlman of not disclosing a curtain that freely rises in response to a wave and freely falls after a wave passes. Thus, either of Bailey et al or Ruhlman modified by Parker would still fail to render independent claim 11 unpatentable. Because claim 4 indirectly depends from claim 11, it is submitted that claim 4 is also allowable of the prior art.

The Examiner has rejected claims 9 and 10 under 35 U.S.C. § 103(a) as being unpatentable over Bailey et al in view of Ruhlman. This ground of rejection is respectfully traversed.

Claim 9 recites attaching at least one flotation device to the upper edge of the curtain, a feature clearly not disclosed by Bailey et al. Ruhlman discloses a curtain having a flotation device 16 attached to its upper edge. The purpose of the flotation device 16 in Ruhlman is to maintain the curtain upright in the water (except in the presence of wave turbulence). However, as described in column 8, lines 40-44 of Bailey et al, it is critical to the operation of the Bailey et al device that the matrix structure 160 be allowed to sink to fill scour location. Attaching a flotation device to the upper edge of the matrix structure 160 would defeat the structure's ability to sink. Accordingly, it would not have been obvious to modify Bailey et al in the manner set forth by the Examiner because this would effectively destroy the intended operation of the Bailey et al device. Furthermore, Ruhlman does not overcome the above-described deficiency of Bailey et al of not disclosing a curtain that substantially impedes water flow therethrough. Thus,

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Bailey et al modified by Ruhlman would still fail to render independent claim 1 unpatentable, meaning that claim 9, which depends from claim 1, would also be allowable.

Applicant notes with appreciation the indication that claims 14, 15 and 17-20 would be allowable if rewritten to include all the limitations of the base claim and any intervening claims. However, in view of the above remarks submitting that independent claims 1 and 11 as amended are allowable, it is felt that the rewriting of claims 14, 15 and 17-20 is not necessary.

New claim 24 has been added to further define the present invention over the prior art. Claim 24 is a combination of the immediately prior version of claim 1 (without the current amendments thereto) and claim 9. For the reasons stated above, applicant submits that it would not have been obvious to provide Bailey et al with a flotation device. Accordingly, it is believed that new claim 24 is allowable over the prior art of record.

In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration of the objections and rejections is requested. Allowance of claims 1-4 and 6-24 at an early date is solicited.

Respectfully submitted,

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Date

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